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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/612,407	07/03/2003	Kazuo Sato	030806	3576

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EXAMINER	
PEARSE, ADEPEJU OMOLOLA	
ART UNIT	**PAPER NUMBER**
1761	

DATE MAILED: 02/22/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/612,407	SATO ET AL.	
	Examiner	Art Unit	
	Adepeju Pearse	1761	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *08 December 2005*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1 and 6-19* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1 and 6-19* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments see pages 13-14 of remarks, filed 12/8/2005, with respect to the rejection(s) of claim(s) 1 and 8 under 35 U.S.C. 102b have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Murray et al (U.S. Pat. No. 5,346,706).

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

3. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out

the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

4. Claims 1 and 6-19 rejected under 35 U.S.C. 103(a) as being unpatentable over Sekibata et al (E.P. Pub. No. 0,523,333) in view of Murray et al (U.S. Pat. No. 5,346,706), Owades et al (U.S. Pat. No. 4,837,034), Satoshi et al (JP Pub. No. H05-068529) and Shimamura et al (U.S. Pat. No. 6,265,000). With regard to claims 1, 8, 13 and 18, Sekibata et al disclose a method for producing non-alcoholic beverage and low alcohol beer the addition of α-glucosidase during the steps of preparing beer, especially at a mashing process in a conventional method for producing beer to convert fermentable sugars in the wort to non-fermentable sugars (page 3 lines 1-4). It would be expected that a conventional method of producing beer comprises a malting process, wort production process, fermentation process and a lagering process as instantly claimed. Sekibata et al also disclose adding α-glucosidase into the saccharifying mash at a mashing process before fermentation (page 3 lines 20-21). Sekibata et al also discloses that α-glucosidase maybe added to wort before fermentation at once or may also be added in several portions (page 3 lines 32-33). It would be expected that α-glucosidase could be added during any of the steps including the wort production step as instantly claimed since it is before the fermentation step. α-glucosidase is used during steps of preparing beer especially at a mashing process to convert fermentable sugars in wort into non-fermentable sugars and the amount of alcohol formed can be reduced (page 3 lines 2-4). However, Sekibata et al does not disclose adjusting the concentration of original extract of wort to 12% to 13%. Murray et al teach a malt beverage process comprising the steps of preparing a boiled malt wort of about 12-20 degrees Plato as in claims 13 and 18,

and the resulting product maybe organoleptically supplemented with beer ester flavors which is then diluted with water to produce a non-alcoholic or low alcoholic malt beverage (abstract). It would be obvious to one of ordinary skill in the art to modify Sekibata et al with Murray et al by utilizing a higher concentration of original extract of wort in order to provide a manufacturer with flexibility to produce low alcoholic or non-alcoholic malt beverages.

5. With regard to claims 6 and 7, Sekibata et al failed to disclose using malt and adjuncts as sugar ingredients. However, Owades et al teach malt and other cereals are converted into sugar during the mashing operation and conventional mashing involves mixing together malt with or without cereal adjuncts (Col 1 lines 18-22). It would have been obvious to one of ordinary skill in the art to modify Sekibata et al with Owades et al because the sugar produced will perform the same function as recited by the applicant.

6. With regard to claims 9-10 and 15, Sekibata et al failed to disclose adding α-glucosidase to the fermentation process and reducing acetic acid concentration with the addition of α-glucosidase. However, Satoshi et al teach adding α-glucosidase to wort in a fermentation process in beer production (Abstract). It would be obvious to expect that the functions of reducing acetic acid and increasing the real degree of fermentation would be an inherent function since the reference process and the instantly claimed process are both adding the same enzyme for the same purpose of converting fermentable sugars into non-fermentable sugars.

7. With regard to claims 11 and 16, Sekibata et al failed to disclose the kind of yeast used.

However, Owades et al teach using brewers yeast to ferment the wort into beer (Abstract). It would have been obvious to one of ordinary skill in the art to modify Sekibata et al because brewers yeast will ferment the wort.

8. With regard to claims 12 and 17, Sekibata et al failed to disclose other yeast other than brewer's yeast. However, Shimamura et al teach using sake yeast or wine yeast in order to have different kinds of flavors for sparkling alcoholic beverages (Col 1 lines 41-43, see examples 6 & 7). It would have been obvious to one of ordinary skill in the art to modify Sekibata et al with Shimamura et al because a variety of flavored alcoholic beverages will be produced.

9. With regard to claims 14 and 19, Sekibata et al disclose that the amount of α-glucosidase incorporated is determined by taking into account the concentration of fermentable sugar in the mash (Page 3 lines 28-30). It would have been obvious to one of ordinary skill in the art to expect that the range recited by the applicant could be within the reference's range since it is a function of the mash amount.

Conclusion

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period

will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Adepeju Pearse whose telephone number is 571-272-8560. The examiner can normally be reached on Monday through Friday, 8.00am - 4.30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Milton Cano can be reached on 571-272-1398. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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